



**MODEL NUMBER:  
10000  
ULTRA LIGHT DUTY  
ONBOARD AIR SYSTEM**

**IMPORTANT:**

**It is essential that you and any other operator of this product read and understand the contents of this manual before installing and using this product.**

SAVE THIS MANUAL FOR FUTURE REFERENCE



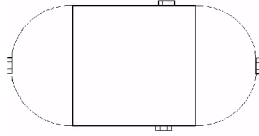
**USER MANUAL**

*Thank you for purchasing this genuine VIAIR Onboard Air system. Contained in one package, you'll find everything you'll need to install a high performance, onboard air source. Please follow the instructions on the following pages to install your new system.*

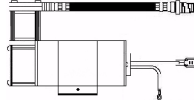
**P/N 10000 – VIAIR ULTRA LIGHT DUTY  
ONBOARD AIR SYSTEM:**

**Components:**

- 1 1.0 Gallon, 4 port VIAIR Air Tank



- 1 98C model VIAIR compressor with leader hose and check valve



**(Check to make sure that you have five labeled packages in your kit. Each package contains the parts needed for specific areas of installation, and may contain smaller bags within each package for specific uses.)**

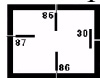
**PARTS PACKAGES**

**Package #1 – Pressure Switch & Relay**

- 1 Pressure Switch - (85 PSI on, 105 PSI off)

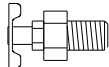


- 1 40-amp relay

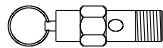


**Package #2 - Fittings**

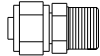
- 1 1/4" NPT Drain Cock



- 1 1/4" NPT 145 PSI Safety Valve



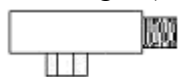
- 1 1/4" NPT Compression Fitting



- 1 1/4" NPT Male Plug



- 1 T-fitting – (1/4" Male x 1/4" Female x 1/8" Female NPT)



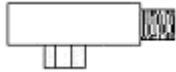
### Package #3 – “Air Out” Air Line

#### Package #4 – Electrical

- |   |                              |
|---|------------------------------|
| 1 | Fuse Holder with 20-amp fuse |
| 1 | 16 GA wire (20 ft.)          |
| 4 | Push-on Female Terminals     |
| 2 | 16-gauge Butt Connectors     |
| 1 | 16-gauge Ring Terminal       |

#### Package #5

- |   |   |
|---|---|
| 1 | T-fitting – (1/4” Male x 1/4” Female x 1/4” Female NPT) |
|---|---|

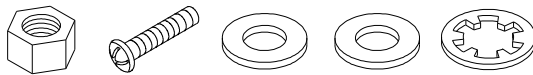


#### Package #6 – BSP Adapters for Air Lockers (for use with pkg. #5)

- |   |  |
|---|--|
| 2 | BSP Adapters (1/4” Male to 1/8” BSP Female) Qty. 2 adapters. |
|---|--|

#### Package #7 – Compressor Installation

- |   |   |
|---|---|
| 4 | 13/64” Nuts, shorter bolts, washers & locking washers (mounting hardware) |
|---|---|

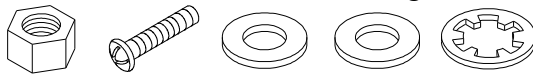


- |   |                          |
|---|--------------------------|
| 1 | Leader Hose Bracket Clip |
|---|--------------------------|



#### Package #8 – Air Tank Installation

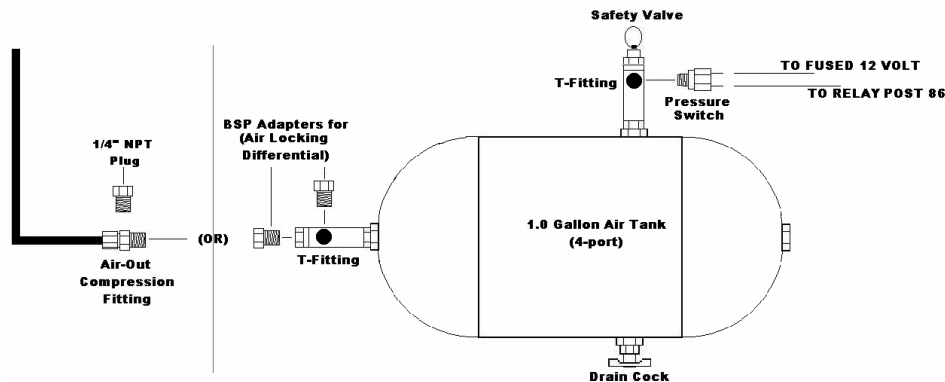
- |   |  |
|---|--|
| 2 | Nuts, bolts, washers and locking washers (mounting hardware) |
|---|--|



+ 2 pieces rubber bushings

## **1.0 Gallon Air Tank Installation**

Your 1.0 gallon air tank comes with four 1/4" NPT port openings. To insure safe & trouble-free use of your air tank, install the drain cock and a safety pressure relief valve.



### **IMPORTANT:**

- Tank is rated for 150 PSI maximum working pressure.
- Tank is not to be used as a breathing device.
- Bleed pressure from tank before servicing.
- Use only attachments or tools rated for 150 PSI working pressure or less.

### **CAUTION! DO NOT PRESSURIZE TANK UNTIL ALL NECESSARY PORT FITTINGS AND ACCESSORIES ARE INSTALLED.**

- Apply sealant to threads of fittings and tighten each part with a wrench.
- Do not over-tighten fittings, since brass threads can easily be stripped.
- Always release air from tank before servicing.

### **WARNING: FAILURE TO DRAIN TANK AND REMOVE CONDENSATION WILL CAUSE TANK TO RUST PREMATURELY.**

- To remove accumulated condensation inside the tank, bleed pressure from tank until pressure is approximately 5 PSI to 20 PSI using drain cock
- Drain water from tank by opening the drain cock drain valve and close after draining tank.
- If drain cock valve is plugged, release all air pressure from tank, remove drain valve and clean, then reinstall.

**IMPORTANT:** Replace air tank 2 to 5 years from date air tank was first used. Adhering to air tank draining guidelines will prolong the life of your air tank.

### **PLEASE NOTE:**

**RUSTED TANKS CAN FAIL CAUSING EXPLOSIONS OR FATAL INJURIES.**

Discard tank immediately if tank is rusted.

**SAFETY VALVE:** When using a safety pressure relief valve, point the safety pressure relief valve away from your body when releasing air. Use the pull ring on the safety relief valve to vent pressure from the tank before servicing.

### **Tank Fittings:**

Install supplied fittings for the air tank in areas where they are most appropriate for your installation using thread sealant or Teflon tape. Make sure that the safety valve is installed in the top of the tank, and that the drain cock is installed in the lowest position of the tank. Be sure that all fittings are accessible since you may have to plumb each fitting as needed to utilize the air tank properly.

### **Air Compressor Installation**

Your Ultra Light Duty Onboard Air System comes complete with a 98C, 10% duty cycle compressor. Please follow the installation instructions that follow to enjoy the best use of your onboard air system.

CAUTION - To reduce risk of electrical shock or electrocution:

- Do not disassemble the compressor. Do not attempt repairs or modifications. Refer to qualified service agencies for all service and repairs.
- Do not use this product in or area where it can fall or be pulled into water or liquids.
- Do not reach for this product if it has fallen into liquid.
- Use this compressor with 12-volt DC systems only.
- This product should never be left unattended during use.

### **Guidelines for Selecting Mounting Location:**

The selection of proper mounting location for your air compressor will help ensure a long and trouble free compressor service life. Please pay close attention to the following:

- Select a flat, upright & secure location where the compressor can be mounted.
- To maximize air compressor performance, install compressor as close to the battery as possible so that length of positive lead wire is as short as possible.
- This compressor is moisture & dust resistant, but NOT WATERPROOF or DUSTPROOF. Do not mount compressor in locations where the unit is likely to come in contact with water or excessive dirt.
- If it is necessary to mount the air compressor further from the battery, such as inside your vehicle or in the bed of your pickup, VIAIR recommends using wire larger than 16 AWG as a positive lead for remote installation.
- Do not mount compressor near areas where flammable liquids are stored.

### **98C Compressor Wiring:**

1. Disconnect ground cable from vehicle's battery.
2. Temporarily position the air compressor in the location where it will be mounted.
3. Route ground wire to the negative post of the battery or to an appropriate grounding point and cut ground wire to length as needed.
4. Mount the 98C air compressor with the two 13/64" (5 mm) bolts, nuts, washers, and locking washers provided. Use of thread locker is recommended.
5. This air compressor comes with a heavy duty heat resistant stainless steel braided leader hose. This leader hose is designed to prolong the life of your air line. Do not remove this leader hose from air compressor.
6. **IMPORTANT:** Please note; the leader hose that came with your compressor has a built-in inline check valve pre-installed. Do not remove inline check valve from leader hose.
7. To mount hose bracket, drill holes with 3/16" drill bit and push self-anchoring hose bracket pin into hole. Route leader hose through hose bracket and secure hose by pressing bracket clamp into locked position.
8. To remove hose from the hose bracket, simply press down on the hose clamp release tab to release bracket clamp.
9. Connect compressor's positive lead wire to one of the leads of your pressure switch.
10. Make sure that your compressor setup is properly fused. The 98C pulls approximately 12 amps of power.
11. Always locate fuse as close as possible to power source.
12. Before connecting to power source, check to make sure that all connections are made properly.
13. Connect and test compressor system by running the compressor for a short time to build up pressure in your air tank.
14. Once air pressure reaches preset cut out pressure of your pressure switch, the compressor will shut off. Inspect all air line connections for leaks with soap and water solution. If a leak is detected, the air line may not be cut squarely or pushed all the way in. Tighten connections if needed.

### **COMPRESSOR OPERATING INSTRUCTIONS**

**IMPORTANT:** The 98C has a maximum working pressure of 130 PSI and is capable of 10% duty cycle. Always operate the compressor at or below the **MAXIMUM PRESSURE RATING** of the compressor. Operation exceeding maximum pressure ratings and or duty cycle will result in damage to air compressor.

1. To prevent discharge of your vehicle's battery and to provide peak performance, we strongly recommend that you keep the vehicle's engine running while using the air compressor.
2. **ONLY OPERATE THE AIR COMPRESSOR IN WELL-VENTILATED AREAS.**

### **98C Compressor Maintenance & Repairs**

1. Periodically check all electrical and fitting connections. Clean and tighten as needed.
2. Periodically check all mounting screws. Tighten as needed.
3. Regularly clean dust and dirt from compressor.
4. Your air compressor is equipped with permanently lubricated, maintenance free motor. Never lubricate compressor.

5. Repairs should be performed by Manufacturer or Manufacturer's Authorized Service Agencies only.

**CAUTION:** Never touch the air compressor or fittings connected to the air compressor with bare hands during or immediately after use. Leader hose and fittings will become very HOT during and after use.

Note: Always mount the compressor at a point higher than the inlet port of the tank to keep moisture from being able to seep back to the tank.

### **Pressure Switch & Relay Installation**

Your VIAIR Medium Duty Onboard Air System comes complete with a pressure switch and a 40-amp relay that will turn on the compressor at 80 PSI, and off at 105 PSI. The pressure switch has a 1/8" NPT inlet at the bottom that will need to be installed into the 1/8" NPT port of the T-fitting supplied in package #2 using thread sealant to allow it to be plumbed directly to your air tank.

*\*For Relay installation, see Relay Wiring Legend contained in the Installation Diagram.*

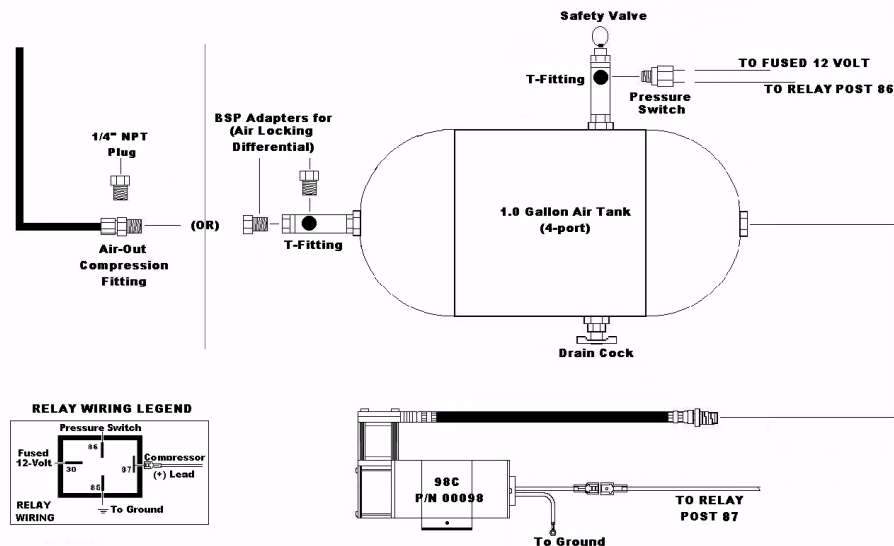
#### **Pressure Switch Installation Tips**

1. Never install your pressure switch in direct line from the inlet port coming from the compressor. Tank pressure can be misread by the pressure switch. Mount the pressure switch on the tank where it receives air pressure reading from deflected air.
2. Never use a pressure switch that is rated beyond your compressor's rated Maximum Working Pressure (130 PSI).
3. Replace with P/N 90101 if the pressure switch requires replacement.

#### **Test Your Onboard Air System**

Run the system to build pressure in tank. When air pressure reaches the pressure switch cut out pressure, the compressor will shut off. Inspect air line connections for leaks with soap and water sprayed with a spray bottle onto connections. If leaks are detected, lines may not be installed properly. Periodically check your system in this manner should your compressor turn on more often than normal without frequent air use.

## **P/N 10003 - VIAIR ULTRA LIGHT DUTY ONBOARD AIR SYSTEM - INSTALLATION DIAGRAM**



**LIMITED WARRANTY**

VIAIR Corporation warrants this product, when properly installed and under normal conditions of use, to be free from defects in workmanship and materials for a period of one year from its original date of purchase. To receive warranty service or repair, please contact VIAIR Corporation.

Returns should be made within one year of the date of purchase, after a Return Goods Authorization (RGA) number has been assigned by VIAIR Corporation. To obtain RGA, fax a copy of your receipt to (949) 585-0188. For complete warranty details, please visit: [www.viaircorp.com/warranty](http://www.viaircorp.com/warranty)

**PLEASE NOTE:**

THIS WARRANTY COVERS PRODUCT DEFECTS ONLY. IT DOES NOT COVER INCIDENTAL OR CONSEQUENTIAL DAMAGES AS RESULT OF MISUSE OR ABUSE.

**MODEL NUMBER:**

- 10000 – ULTRA LIGHT DUTY  
ONBOARD AIR SYSTEM



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